

## Typical Market Barriers Faced by Energy Efficiency Program Managers

Structural	Misplaced or Split Incentives	Cases in which the incentives of an agent charged with purchasing energy efficiency are not aligned with those of the persons who would benefit from the purchase, <i>e.g.</i> , landlord/tenant relationship.
	First costs and capital constraints	Many efficiency measures have high upfront costs and small financial benefits in the form of reduced future energy bills. Issues related to high first costs are exacerbated by capital constraints. Often, limited capital resources are targeted at growing revenues ( <i>i.e.</i> expanding markets and product lines), not reducing operational costs.
	Information and Search Costs	The costs of identifying energy-efficient products or services or of learning about energy-efficient practices. This would include the value of time spent finding out about or locating a product or service or hiring someone else to do so.
	Hassle or Transaction Costs	The indirect costs of acquiring energy efficiency, including the time, materials, and labor involved in obtaining or contracting for an energy-efficient product or service. (Distinct from search costs in that it refers to what happens once a product has been located.)
Behavioral	Fragmented Markets and end uses	Efficiency potential is spread over tens of thousands of building facilities clustered in at least 10-12 building types, and innumerable end use technologies
	Risk and Performance Uncertainties	The difficulties consumers face in evaluating claims about future benefits. Closely related to high search costs, is that acquiring the information needed to evaluate claims about future performance is rarely without cost.
	Customs and consumer habits	Building operations practices that prevent/stall the efficiency project implementation.
	High internal rates of return	Studies indicate that many commercial organizations expect 3 - 5 year project pay backs on investments. Such a high hurdle rate inhibits deeper retrofit projects that typically pay back over 7 to 10 years.
	Bounded Rationality	The behavior of an individual during the decision-making process that either seems (or actually is) inconsistent with the individual's goals.

Availability	Lack of Awareness and information	Building owners and facility managers are often unaware of the potential of efficiency projects to reduce energy bills. Thinking that their building is already efficient, many facility managers have a limited knowledge of efficient technologies and their benefits.
	Product or Service Unavailability	The failure of manufacturers, distributors, or vendors to make a product or service available in a given area or market. May result from collusion, bounded rationality, or supply constraints.
	Access to Financing	The difficulties associated with the lending industry's historic inability in underwriting procedures to account for the unique features of loans for energy-savings products ( <i>i.e.</i> that future reductions in utility bills increase the borrower's ability to repay a loan).
	Ineffective installation of equipment, lack of building commissioning	Because building developers have little incentive to ensure proper installation of building equipment and systems ( <i>i.e.</i> HVAC, Lighting), or to commission buildings upon completion, many buildings perform poorly within a few months of full occupancy.